

**Amendments to Claims / Listing of Claims:**

This listing of claims replaces prior version(s).

1-20. (*Cancelled*)

21. (**CURRENTLY AMENDED**) An interactive digital television set-top apparatus for coupling to a network for providing contextually-mapped biomedical media service comprising:

an interface for receiving a video stream from the network;

a controller for causing the video stream to be stored in a digital video recorder, such stored video being accessible for play-back using a software search agent; and

a personal biological sensor for generating a real-time signal for transmission via the network interface, the real-time signal enabling such set-top apparatus to be classified in a promotional group for targeted messaging, whereby a promotion video stream is directed to the set-top apparatus adaptively in response to the real-time signal, the received video stream comprising a biomedical expertise message for clinical diagnosis that is contextually mapped to a patient group by comparing automatically with an associated value stored in a database a patient diagnosis sensed using the sensor comprising a micromachined transducer coupled to a diagnosed patient, the biomedical expertise message being scheduled for viewing by one or more patient belonging to the patient group.

22. (**PREVIOUSLY PRESENTED**) The apparatus of claim 21 wherein:

the sensor comprises a DNA or protein probe, whereby the promotion video stream comprises a tele-medicine application associated with sensed DNA or protein.

23. (**PREVIOUSLY PRESENTED**) The apparatus of claim 22 wherein:

the sensor comprises a GPS location device, whereby the promotion video stream comprises a vehicular or mobile application associated with sensed location.

24. (**CURRENTLY AMENDED**) An interactive digital television set-top method for providing contextually-mapped biomedical media service comprising the steps of:

receiving a video stream from via a network interface;  
storing the video stream in a digital video recorder for play-back, such stored video being accessible using a software search agent; and  
generating a personal biological sensor signal for transmission via the network interface, the signal enabling set-top classification in a promotional group for targeted messaging, whereby a promotion video stream is directed adaptively in response to the signal, the received video stream comprising a biomedical expertise message for clinical diagnosis that is contextually mapped to a patient group by comparing automatically with an associated value stored in a database a patient diagnosis sensed using the sensor comprising a micromachined transducer coupled to a diagnosed patient, the biomedical expertise message being scheduled for viewing by one or more patient belonging to the patient group.

25. (**PREVIOUSLY PRESENTED**) The method of claim 24 wherein:

the signal is generated by a DNA or protein probe, whereby the promotion video stream comprises a tele-medicine application associated with sensed DNA or protein.

26. (**PREVIOUSLY PRESENTED**) The method of claim 25 wherein:

the signal is generated by a GPS location device, whereby the promotion video stream comprises a vehicular or mobile application associated with sensed location.